

AMENDMENTS TO THE CLAIMS

Please amend Claims 141, 146, 148, 151 and 205 by deleting the extraneous commas as shown in the following complete list of claims.

1.-136. (Canceled).

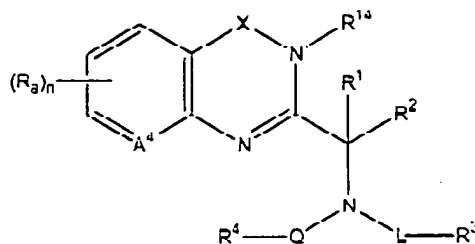
137. (Previously presented) The compound of Claim 141, wherein X is -C(O)-.

138. (Previously presented) The compound of Claim 141, wherein R¹⁴ is a substituted or unsubstituted phenyl.

139. (Previously presented) The compound of Claim 137, wherein R¹⁴ is a substituted or unsubstituted phenyl.

140. (Canceled).

141. (Currently amended) A compound having the formula:



or a pharmaceutically acceptable salt thereof wherein:

A⁴ is N;

X is -C(O)- or -CH₂-;

R¹ and R² are members independently selected from the group consisting of H and (C₁-C₄)alkyl;

R³ is a member selected from the group consisting of hydroxy, (C₁-C₃)alkoxy, amino, (C₁-C₈)alkylamino, di(C₁-C₈)alkylamino, (C₂-C₈)heteroalkyl, (C₃-C₉)heterocyclyl, (C₁-C₈)acylamino, amidino, guanidino, urcido, cyano, heteroaryl, -CONR⁹R¹⁰ and -CO₂R¹¹;

R⁴ is substituted or unsubstituted benzyl, wherein said substituents are selected from the group consisting of halogen, halo(C₁-C₄)alkyl, halo(C₁-C₄)alkoxy, cyano, nitro and phenyl;

each R^9 , R^{10} and R^{11} is independently selected from the group consisting of H, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, heteroaryl, aryl, heteroaryl (C_1-C_6) alkyl, heteroaryl (C_2-C_8) heteroalkyl, aryl (C_1-C_8) alkyl and aryl (C_2-C_8) heteroalkyl;

R^{14} is a substituted or unsubstituted member selected from the group consisting of phenyl, pyridyl, thiazolyl, thienyl and pyrimidinyl;

Q is $-C(O)-$;

L is (C_1-C_8) alkylene;

the subscript n is an integer from 0 to 4; and

each R_u is independently selected from the group consisting of halogen, $-OR'$, $-OC(O)R'$, $-NR'R''$, $-SR'$, $-R'$, $-CN$, $-NO_2$, $-CO_2R'$, $-CONR'R''$, $-C(O)R'$, $-OC(O)NR'R''$, $-NR''C(O)R'$, $-NR''C(O)_2R'$, $[[.]]$ $-NR'-C(O)NR''R'''$, $-NH-C(NH_2)=NH$, $-NR'C(NH_2)=NH$, $-NII-C(NH_2)=NR'$, $-S(O)R'$, $-S(O)_2R'$, $-S(O)_2NR'R''$, $-N_3$, $-CII(Ph)_2$, perfluoro (C_1-C_4) alkoxy and perfluoro (C_1-C_4) alkyl, wherein R' , R'' and R''' are each independently selected from the group consisting of H, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, unsubstituted aryl, unsubstituted heteroaryl, (unsubstituted aryl)- (C_1-C_4) alkyl and (unsubstituted aryl)oxy- (C_1-C_4) alkyl.

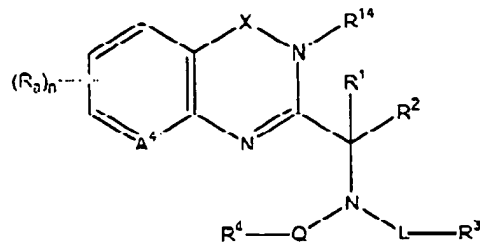
142. (Previously presented) The compound of Claim 141, wherein R^{14} is selected from the group consisting of substituted phenyl, substituted pyridyl, substituted thiazolyl and substituted thienyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8) alkoxy, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

143. (Previously presented) The compound of Claim 151, wherein R^{14} is substituted phenyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8) alkoxy, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

144. (Previously presented) The compound of Claim 141, wherein R^{14} is substituted phenyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8) alkoxy, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

145. (Previously presented) The compound of Claim 141, wherein R^1 is selected from the group consisting of methyl, ethyl and propyl, and R^2 is hydrogen.

146. (Currently amended) A compound having the formula:



or a pharmaceutically acceptable salt thereof wherein:

A⁴ is N;

X is -C(O)- or -CH₂-;

R¹ and R² are each methyl;

R³ is a member selected from the group consisting of hydroxy, (C₁-C₈)alkoxy, amino, (C₁-C₈)alkylamino, di(C₁-C₈)alkylamino, (C₂-C₈)heteroalkyl, (C₃-C₉)heterocyclyl, (C₁-C₈)acylamino, amidino, guanidino, ureido, cyano, heteroaryl, -CONR⁹R¹⁰ and -CO₂R¹¹;

R⁴ is a member selected from the group consisting of (C₁-C₂₀)alkyl, (C₂-C₂₀)heteroalkyl, heteroaryl, aryl, heteroaryl(C₁-C₆)alkyl, heteroaryl(C₂-C₆)heteroalkyl, aryl(C₁-C₆)alkyl and aryl(C₂-C₆)heteroalkyl;

each R⁹, R¹⁰ and R¹¹ is independently selected from the group consisting of H, (C₁-C₈)alkyl, (C₂-C₈)heteroalkyl, heteroaryl, aryl, heteroaryl(C₁-C₆)alkyl, heteroaryl(C₂-C₈)heteroalkyl, aryl(C₁-C₈)alkyl and aryl(C₂-C₈)heteroalkyl;

R¹⁴ is a substituted or unsubstituted member selected from the group consisting of phenyl, pyridyl, thiazolyl, thienyl and pyrimidinyl;

Q is -C(O)-;

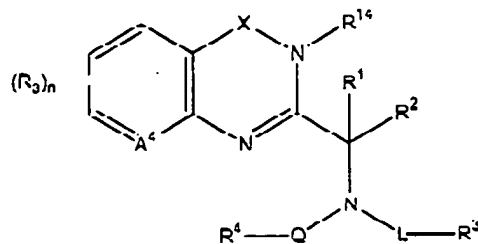
L is (C₁-C₈)alkylene;

the subscript n is an integer from 0 to 4; and

each R_a is independently selected from the group consisting of halogen, -OR', OC(O)R', NR'R'', -SR', -R', -CN, -NO₂, -CO₂R', -CONR'R'', -C(O)R', -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)₂R', [L], -NR'-C(O)NR''R''', -NH-C(NH₂)=NH, -NR'C(NH₂)=NH, -NH-C(NH₂)=NR', -S(O)R', -S(O)₂R', -S(O)₂NR'R'', -N₃, -CH(Ph)₂, perfluoro(C₁-C₄)alkoxy and perfluoro(C₁-C₄)alkyl, wherein R', R'' and R''' are each independently selected from the group consisting of H, (C₁-C₈)alkyl, (C₂-C₈)heteroalkyl, unsubstituted aryl, unsubstituted heteroaryl, (unsubstituted aryl)-(C₁-C₄)alkyl and (unsubstituted aryl)oxy-(C₁-C₄)alkyl.

147. (Previously presented) The compound of Claim 141, wherein L is (C₁-C₈)alkylene.

148. (Currently amended) A compound having the formula:



or a pharmaceutically acceptable salt thereof wherein:

A⁴ is N;

X is -C(O)- or -CH₂-;

R¹ and R² are members independently selected from the group consisting of H and (C₁-C₄)alkyl;

R³ is a member selected from the group consisting of (C₁-C₈)alkoxy, (C₃-C₉)heterocyclyl and (C₁-C₈)acylamino;

R⁴ is a member selected from the group consisting of (C₁-C₂₀)alkyl, (C₂-C₂₀)heteroalkyl, heteroaryl, aryl, heteroaryl(C₁-C₆)alkyl, heteroaryl(C₂-C₆)heteroalkyl, aryl(C₁-C₆)alkyl and aryl(C₂-C₆)heteroalkyl;

R¹⁴ is a substituted or unsubstituted member selected from the group consisting of phenyl, pyridyl, thiazolyl, thienyl and pyrimidinyl;

Q is -C(O)-;

L is (C₁-C₈)alkylene;

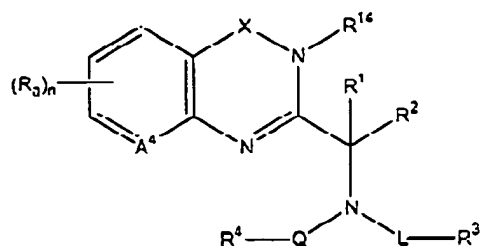
the subscript n is an integer from 0 to 4; and

each R_a is independently selected from the group consisting of halogen, -OR', -OC(O)R', -NR'R'', -SR', -R', -CN, -NO₂, -CO₂R', -CONR'R'', -C(O)R', -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)₂R', [[L]] -NR'-C(O)NR''R''', -NII-C(NII₂)-NII, -NR'C(NH₂)=NH, -NII-C(NII₂)-NR', -S(O)R', -S(O)₂R', -S(O)₂NR'R'', -N₃, CH(Ph)₂, perfluoro(C₁-C₄)alkoxy and perfluoro(C₁-C₄)alkyl, wherein R', R'' and R''' are each independently selected from the group consisting of H, (C₁-C₈)alkyl, (C₂-C₈)heteroalkyl, unsubstituted aryl, unsubstituted heteroaryl, (unsubstituted aryl)-(C₁-C₄)alkyl and (unsubstituted aryl)oxy-(C₁-C₄)alkyl.

149. (Canceled).

150. (Previously presented) The compound of Claim 141, wherein R³ is heteroaryl.

151. (Currently amended) A compound having the formula:



or a pharmaceutically acceptable salt thereof wherein:

A⁴ is N;

X is -C(O)- or -CH₂-;

R¹ and R² are members independently selected from the group consisting of H and (C₁-C₄)alkyl;

R³ is selected from the group consisting of substituted or unsubstituted pyridyl and substituted or unsubstituted imidazolyl;

R⁴ is a member selected from the group consisting of (C₁-C₂₀)alkyl, (C₂-C₂₀)heteroalkyl, heteroaryl, aryl, heteroaryl(C₁-C₆)alkyl, heteroaryl(C₂-C₆)heteroalkyl, aryl(C₁-C₆)alkyl and aryl(C₂-C₆)heteroalkyl;

R¹⁴ is a substituted or unsubstituted member selected from the group consisting of phenyl, pyridyl, thiazolyl, thienyl and pyrimidinyl;

Q is -C(O)-;

L is (C₁-C₈)alkylene;

the subscript n is an integer from 0 to 4; and

each R_a is independently selected from the group consisting of halogen, -OR', -(O)C(O)R', -NR'R'', -SR', -R', -CN, -NO₂, -CO₂R', -CONR'R'', -C(O)R', -OC(O)NR'R'', -NR''C(O)R', -NR''C(O)₂R', [[,]]-NR'-C(O)NR''R''', -NH-C(NH₂)=NH, -NR'C(NH₂)=NH, -NH-C(NH₂)=NR', -S(O)R', -S(O)₂R', -S(O)₂NR'R'', -N₃, -CH(Ph)₂, perfluoro(C₁-C₄)alkoxy and perfluoro(C₁-C₄)alkyl, wherein R', R'' and R''' are each independently selected from the group consisting of H, (C₁-C₈)alkyl, (C₂-C₈)heteroalkyl, unsubstituted aryl, unsubstituted heteroaryl, (unsubstituted aryl)-(C₁-C₄)alkyl and (unsubstituted aryl)oxy-(C₁-C₄)alkyl.

152. (Previously presented) The compound of Claim 141, wherein R¹ and R² are each independently selected from the group consisting of H, methyl and ethyl; R¹⁴ is phenyl; L is methylene, ethylene or propylene; and R³ is selected from the group consisting of substituted or unsubstituted pyridyl and substituted or unsubstituted imidazolyl.

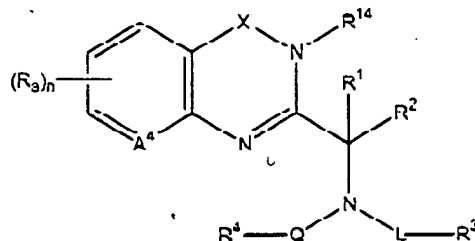
153. (Previously presented) A pharmaceutical composition comprising the compound of Claim 141, 146, 148 or 151 and a pharmaceutically acceptable carrier or diluent.

154.-202. (Canceled).

203. (Previously presented) A method for the modulation of CXCR3 function in a cell, comprising contacting said cell with a compound of Claim 141, 146, 148 or 151.

204. (Previously presented) A method for the modulation of CXCR3 function, comprising contacting a CXCR3 protein with a compound of Claim 141, 146, 148 or 151.

205. (Currently amended) A compound having the formula:



or a pharmaceutically acceptable salt thereof wherein:

A⁴ is N;

X is -C(O)- or -CH₂-;

R¹ and R² are members independently selected from the group consisting of H and (C₁-C₄)alkyl;

R³ is a member selected from the group consisting of hydroxy, (C₁-C₈)alkoxy, amino, (C₁-C₈)alkylamino, di(C₁-C₈)alkylamino, (C₂-C₈)heteroalkyl, (C₃-C₉)heterocyclyl, (C₁-C₈)acylamino, amidino, guanidino, urcido, cyano, heteroaryl, -CONR⁹R¹⁰ and -CO₂R¹¹;

R⁴ is substituted or unsubstituted benzyl, wherein said substituents are selected from the group consisting of halogen, halo(C₁-C₄)alkyl, halo(C₁-C₄)alkoxy, cyano, nitro and phenyl;

each R⁹, R¹⁰ and R¹¹ is independently selected from the group consisting of H, (C₁-C₈)alkyl, (C₂-C₈)heteroalkyl, heteroaryl, aryl, heteroaryl(C₁-C₆)alkyl, heteroaryl(C₂-C₈)heteroalkyl, aryl(C₁-C₈)alkyl and aryl(C₂-C₈)heteroalkyl;

R¹⁴ is substituted or unsubstituted aryl or heteroaryl;

Q is -C(O)-;

L is (C₁-C₈)alkylene;

the subscript n is an integer from 0 to 4; and

each R_3 is independently selected from the group consisting of halogen, $-OR'$, $-OC(O)R'$, $-NR'R''$, $-SR'$, $-R'$, $-CN$, $-NO_2$, $-CO_2R'$, $-CONR'R''$, $-C(O)R'$, $-OC(O)NR'R''$, $-NR''C(O)R'$, $-NR''C(O)_2R'$, $[[,]]$, $-NR'-C(O)NR''R'''$, $-NH-C(NH_2)=NH$, $-NR'C(NH_2)=NH$, $-NH-C(NH_2)=NR'$, $-S(O)R'$, $-S(O)_2R'$, $-S(O)_2NR'R''$, $-N_3$, $-CH(Ph)_2$, perfluoro(C_1-C_4)alkoxy and perfluoro(C_1-C_4)alkyl, wherein R' , R'' and R''' are each independently selected from the group consisting of H, (C_1-C_8)alkyl, (C_2-C_8)heteroalkyl, unsubstituted aryl, unsubstituted heteroaryl, (unsubstituted aryl)-(C_1-C_4)alkyl and (unsubstituted aryl)oxy-(C_1-C_4)alkyl.

206. (Previously presented) The compound of Claim 205, wherein X is $-C(O)-$.

207. (Previously presented) The pharmaceutical composition of Claim 153, wherein X is $-C(O)-$.

208. (Previously presented) The pharmaceutical composition of Claim 153, wherein R^{14} is a substituted or unsubstituted phenyl.

209.-210. (Canceled).

211. (Previously presented) The pharmaceutical composition of Claim 153, wherein R^{14} is selected from the group consisting of substituted phenyl, substituted pyridyl, substituted thiazolyl and substituted thienyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8)alkoxy, (C_1-C_8)alkyl, (C_2-C_8)heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

212.-214. (Canceled).

215. (Previously presented) The pharmaceutical composition of Claim 153, wherein L is (C_1-C_4)alkylene.

216. (Canceled).

217. (Previously presented) The method of Claim 203, wherein X is $-C(O)-$.

218. (Previously presented) The method of Claim 203, wherein R^{14} is a substituted or unsubstituted phenyl.

219-220. (Canceled).

221. (Previously presented) The method of Claim 203, wherein R^{14} is selected from the group consisting of substituted phenyl, substituted pyridyl, substituted thiazolyl and substituted thienyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8) alkoxy, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

222. (Previously presented) The method of Claim 221, wherein R^{14} is substituted phenyl, wherein the substituents are selected from the group consisting of cyano, halogen, (C_1-C_8) alkoxy, (C_1-C_8) alkyl, (C_2-C_8) heteroalkyl, $CONH_2$, methylenedioxy and ethylenedioxy.

223.-224. (Canceled).

225. (Previously presented) The method of Claim 204, wherein T is (C_1-C_4) alkylene.

226. (Canceled).